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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,397	06/12/2006	Makoto Kihara	292489US0PCT	1172
22850	7590	01/28/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			ANDERSON, JERRY W	
			ART UNIT	PAPER NUMBER
			1794	
			NOTIFICATION DATE	DELIVERY MODE
			01/28/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/582,397	Applicant(s) KIHARA ET AL.	
	Examiner JERRY W. ANDERSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/08/2006/07/2007, 6/11/2008.</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 1-9 are objected to because of the following informalities: the applicant uses the word "and" in the phrase "wheat, barley, oats and rye". Examiner reasonably assumes that the term intended by the applicant is "or". Appropriate correction is required.
2. Claim 5 is objected to because of the following informalities: the applicant uses the word "density". Examiner reasonably assumes that the term intended by the applicant is "concentration". Appropriate correction is required.
3. Claim 8 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should be asserted in the alternative only; the claim is dependent on claims 1-7. See MPEP § 608.01(n).

Specification

It is noted that within the "summary of invention" section of the specification, reference is made to specific claims and what they provide. Any amendment to the claims, especially deletion of the claims, will thus alter this disclosure. Upon amendment to the claims, applicant is encouraged to amend the specification accordingly, or else simply deleting reference to specific claim numbers altogether, so long as no new matter is introduced or deleted.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Applicant claims a method using wheat, barley oats and rye, however in the specification, the Applicant refers only to using barley or wheat separately. Applying the Wands factors analysis (in re Wands, 8 USPQ2D 1400, MPEP 2164.01(a)), there are two factors that cause problems: the amount of guidance provided by the inventor, and the breadth of the claims.

The Applicant provides temperature and times for the germination of barley, with graphs as to the production of the functional ingredients of interest. There is no such guidance for the other grains listed. In order to practice this invention as claimed, the data as to temperatures and times for the optimum production of the functional ingredients for each of the grains would have to be established.

The Applicant broadly claims the processing of wheat, barley, oats and rye, simultaneously. Limitation of this claim by substituting "or" for "and" would limit the claims, and allow one of ordinary skill to practice this invention.

Therefore, the practice of this currently-claimed invention would entail undue experimentation by one of ordinary skill in the art.

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The term "predetermined time" in claims 1, 2, 3, and 4 is a relative term which renders the claim indefinite. The term "predetermined time" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Without further guidance from the applicant as to the parameters set by the predetermined values, one of ordinary skill in the art would not be able to determine the metes and bounds of the claim, which renders this claim indefinite.

8. The term "predetermined temperature" in claim 3 is a relative term which renders the claim indefinite. The term "predetermined temperature" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Without further guidance from the applicant as to the parameters set by the predetermined values, one of ordinary skill in the art would not be able to determine the metes and bounds of the claim, which renders this claim indefinite.

9. The term "predetermined density" in claim 3 is a relative term which renders the claim indefinite. The term "predetermined density" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one

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of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Without further guidance from the applicant as to the parameters set by the predetermined values, one of ordinary skill in the art would not be able to determine the metes and bounds of the claim.

10. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the temperature of the soaking water, the temperature of the drying process, and the time required, respectively, for each step. Furthermore, it is unclear as to what is encompassed by the term “adjusted” and “controlling” with regard to these steps and parameters. Said elements are discussed in the embodiments listed in the specification, but are not claimed. Without guidance from the applicant as to the parameters, the soaking temperature and time, the drying process temperature and time, one of ordinary skill in the art would not be able to determine the metes and bounds of the claims.

11. Claims 1-9 are indefinite for the recitation of the phrase “functional ingredients”. It is unclear (a) what ingredients are referred and encompassed by the claim, and (b) what purpose (i.e. function) these ingredients provide. One skilled in the art would not be able to ascertain the metes and bounds, nor carry out, the claimed invention.

12. Claim 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The claim states “gibberellin process is performed”, without any parameters listed as to the amount of gibberellin (or gibberellic

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acid) is added, the temperature, the time allotted for such treatment. Without guidance from the applicant as to aforesaid parameters, one of ordinary skill in the art would not be able to determine the metes and bounds of the claims.

13. Claim 2, 3, and 6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The claims state that the germination process is controlled to adjust the functional ingredients contents, (claim 2), the functional ingredients are adjusted by controlling the temperature of the drying process, (claim 3), the extraction volume of any functional ingredients are adjusted by controlling the temperature of the extraction solvent (claim 6), no parameters nor methods are included as to the how or with what the various processes are being controlled, nor to what end. Without guidance from the applicant as to aforesaid parameters, one of ordinary skill in the art would not be able to determine the metes and bounds of the claims.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1-9 rejected under 35 U.S.C. 102(b) as being anticipated by Luchsinger, W. W., U.S.Pat. # 3,085,945 as evidenced by Malta (soft drink) found on [http://en.wikipedia.org/wiki/Malta_\(soft_drink\)](http://en.wikipedia.org/wiki/Malta_(soft_drink)).

15. Regarding claim 1, Luchsinger discloses a processing method (lines 14 col.1 to line 28 col. 2 '945) wherein wheat, rye, oats or barley, (lines 13-14 col. 1 '945) are soaked in water, (lines 30-33 col.1 '945) for two to three days (lines 36 col.1 '945)

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Note that the claim in question states wheat, barley, oats and rye. This has been addressed in the 35 U.S.C. § 112 rejection, see above.

16. Regarding claim 2, Luchsinger discloses a processing method (lines 14 col.1 to line 28 col. 2 '945) wherein wheat, rye, oats or barley, (lines 13-14 col. 1 '945) are soaked in water, (lines 30-33 col.1 '945) for two to three days (lines 36 col.1 '945) the grain is germinated. (lines 45 col. 1 to 19 col. 2 '945) Wherein the conditions are controlled (lines 3-8 col. 2, lines 59-63 col. 1 '945) to give optimum recoveries of malt. (lines 11-12, col. 1 '945) Applicant admits that the soaking process is the same as used in producing malts for brewing. (lines 31-34 pg 12 Applicant's specification)

17. Regarding claim 3, Luchsinger discloses the claimed invention, as discussed above, including after germination the seeds are dried. (lines 53-58 col. 6 '945) Applicant admits that it well known in the art that the desired functional ingredients (amino acids , β -glucan) are commonly produced during germination processes.(lines 4-9, lines 21-27 pg 2 Applicant's specification)

18. Regarding claim 4 and 5, Luchsinger discloses the claimed invention, as discussed above, including gibberellin or gibberellic acid is added to the grain after the soaking step at levels of 0.5 to 1 ppm (table 5 '945)

19. Regarding claims 6 and 7, Luchsinger discloses the claimed invention, as disclosed above, including final processing of the dried malt, grinding and extraction of the malted products with water in a mashing operation. (lines 12-19 col. 2 '945)

Mashing is a term of art well known in the brewing industry.

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20. Regarding claims 8 and 9, Luchsinger discloses that malted grains (oats, barley wheat and rye) and the extracts thereof have been used for food. (lines 16-17 col.1 '945) Further use of malted grain products is shown, in the reference . Also see Malta (soft drink) found at [http://en.wikipedia.org/wiki/Malta_\(soft_drink\)](http://en.wikipedia.org/wiki/Malta_(soft_drink)) which states that in Germany, malt extracts were made into soft drinks such as Malzbier®, which was regarded as a fortifying food for nursing mothers and invalids, until the 1950's. Malzbier® is still being marketed in Europe.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRY W. ANDERSON whose telephone number is (571)270-3734. The examiner can normally be reached on 7 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jwa.

/KEITH D. HENDRICKS/
Supervisory Patent Examiner, Art Unit 1794